

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BEENS, Jan

Atty. Ref.: 3687-24

Serial No. unknown

Group:

Filed: March 7, 2002

Examiner:

For: MODULATOR FOR GAS CHROMATOGRAPHY

* * * * *

March 7, 2002

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

PRELIMINARY AMENDMENT

In order to place the above-identified application in better condition for examination, please amend the application as follows:

IN THE SPECIFICATION

Please substitute the following paragraphs in the specification for corresponding paragraphs previously presented. A copy of the amended specification paragraphs showing current revisions is attached.

Page 1, before the first line, please insert as a separate paragraph:

This application is the US national phase of international application PCT/IB00/02253 filed 28 November 2001, which designated the US.

IN THE CLAIMS

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

6. A modulator according to claim 4, wherein said predetermined time is ranging from about 0.1 seconds to about 30 seconds.

7. A modulator according to claim 4 wherein said cycle time is the sum of the predetermined times of all valves.

8. A modulator according to claim 2, wherein said cycle time is ranging from about 0.1 seconds to about 30 seconds.

9. A modulator according to claim 1, wherein each said nozzles has an opening in the form of a slit parallel to said capillary length.

11. A modulator according to claim 1, wherein each said nozzle is formed by a set of capillaries aligned in parallel to said capillary column length.

14. A modulator according to claim 1, wherein said nozzle(s) is(are) inserted in a metal socket.

16. A modulator according to claim 1, wherein said column length is mounted in stretched conditions.

17. Use of a modulator according to claim 1 for modulating the solute fractions issued by a first chromatographic column and to be fed to a second chromatographic column in a comprehensive two dimensional gas chromatographic system.

18. Use of a modulator according to claim 1 for modulating the injected fractions immediately downstream the injector in a gas chromatographic system.

19. Use of a modulator according to claim 1, for modulating the eluting fractions from a gas chromatographic column immediately upstream the detector of a gas chromatographic system.

BEENS, Jan
Serial No. unknown

1000 703-44 04-16-02

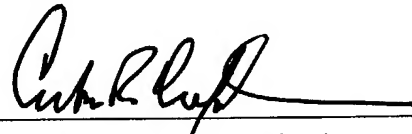
REMARKS

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) is captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Arthur R. Crawford
Reg. No. 25,327

ARC:ecb
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Page 1, before the first line, please insert as a separate paragraph:

This application is the US national phase of international application
PCT/IB00/02253 filed 28 November 2001, which designated the US.

IN THE CLAIMS

6. A modulator according to claim 4 ~~or 5~~, wherein said predetermined time is ranging from about 0.1 seconds to about 30 seconds.
7. A modulator according to ~~one of claims 4, 5 or 6~~, wherein said cycle time is the sum of the predetermined times of all valves.
8. A modulator according to ~~one of the claims 2 to 7~~, wherein said cycle time is ranging from about 0.1 seconds to about 30 seconds.
9. A modulator according to ~~one of the preceding claims~~ 1, wherein each said nozzles has an opening in the form of a slit parallel to said capillary length.
11. A modulator according to ~~one of claims 1 to 8~~, wherein each said nozzle is formed by a set of capillaries aligned in parallel to said capillary column length.

14. A modulator according to ~~one of the preceding claims~~ 1, wherein said nozzle(s) is(are) inserted in a metal socket.

16. A modulator according to ~~one of the preceding claims~~ 1, wherein said column length is mounted in stretched conditions.

17. Use of a modulator according to ~~one of the claims 1 to 15~~ for modulating the solute fractions issued by a first chromatographic column and to be fed to a second chromatographic column in a comprehensive two dimensional gas chromatographic system.

18. Use of a modulator according to ~~one of the claims 1 or 2 and 8 to 16~~ for modulating the injected fractions immediately downstream the injector in a gas chromatographic system.

19. Use of a modulator according to ~~one of the claims 1 or 2 and 8 to 6~~, for modulating the eluting fractions from a gas chromatographic column immediately upstream the detector of a gas chromatographic system.